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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---------------------------|-------------|----------------------|---------------------|------------------|
| 10/649,213 | 08/26/2003 | Luis F. Barron | DP-310333 | 6134 |
| 22851 | 7590 | 05/02/2005 | EXAMINER | |
| DELPHI TECHNOLOGIES, INC. | | | JACYNA, J CASIMER | |
| M/C 480-410-202 | | | ART UNIT | |
| PO BOX 5052 | | | PAPER NUMBER | |
| TROY, MI 48007 | | | 3751 | |

DATE MAILED: 05/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/649,213

Applicant(s)

BARRON ET AL.

Examiner

J. Casimer Jacyna

Art Unit

3751

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-7 and 9-20 is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☒ Claim(s) 8 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 02052004.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Art Unit: 3751

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 3, 6, 9, 11, 12 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Mueller. Mueller discloses an actuator that is of a size and shape so as to be capable of use on a vehicle including a housing 50, a plunger 86, a valve element 70, a rigid valve seat 100 and a resilient support that allows for lateral motion of the valve seat 114.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2, 10 and 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mueller in view of Ohya. Mueller discloses a refrigeration system control valve substantially as claimed but does not disclose the use of the valve on a vehicle with a vehicle control system. However, Ohya teaches another refrigeration control valve and system which is used on a vehicle (see paragraphs 27, 30 and 33) for the purpose of cooling the vehicle during use. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made that the refrigeration valve and control of Mueller could be used on a vehicle refrigeration system as, for

example, taught by Ohya in order to assist in cooling the vehicle and to expand the uses and applicability of the disclosed valve.

5. Claims 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mueller in view of Coppock. Mueller discloses a control valve with a mechanically actuated plunger substantially as claimed but does not disclose the use of a solenoid coil.

However, Coppock teaches another control valve with an actuated plunger system 54 and further teaches in paragraph 43, column 4, that mechanical actuators as disclosed in Mueller and solenoid coil actuators as claimed are art recognized equivalents for accomplishing the same function of actuating the plunger and the valve. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made that a solenoid coil actuator could be substituted for the mechanical actuator disclosed in Mueller as, for example, taught by Coppock because the solenoid coil actuator is capable of performing the same function and will work equally well in actuating the plunger in the valve of Mueller.

6. Claims 1, 3-7, 9 and 11-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Grove. Grove discloses an actuator that is of a size and shape so as to be capable of use on a vehicle including a housing 10, a plunger as disclosed on col. 3, line 31 (the operating rod), a valve element 11, a rigid valve seat 43, 44, a resilient support that allows for lateral motion of the valve seat 23 and an electrical actuator or coil on col. 3, lines 37-38.

7. Claims 2, 10 and 16-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grove in view of Douthitt et al. Grove discloses a gate valve

substantially as claimed but does not disclose the use of the valve on a vehicle with a vehicle control system. However, Douthitt teaches another gate valve 40 which is used on a vehicle for the purpose of controlling fluid flow on a vehicle. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made that the gate valve of Grove could be used on a vehicle as, for example, taught by Douthitt in order to control fluid flow on a vehicle.

8. Claim 8 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to J. Casimer Jacyna whose telephone number is 571-272-4889. The examiner can normally be reached on Wed. thru Fri. 9AM-7PM, Mon. 7AM-1PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Justine Yu can be reached on 703-272-4835. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



J. Casimer Jacyna
Primary Examiner
Art Unit 3751

JCJ